ABSTRACT

The multimedia content browsing system for small mobile devices smoothly blends three key tasks: querying the multimedia contents by keywords, exploring the search results by viewing keyframes of the multimedia contents, and playing a stream of the multimedia contents, e.g., videos or video segments. Videos can be stored in a segment-based multimedia content database, which is designed to support the browsing, retrieval, and reuse of videos. A layered imaging model is introduced where each layer may have its own transparent value set individually, continuously, and interactively, and the layers can overlap on top of each other when rendered on the screen. Since a small mobile device alone may not have enough resources to handle the entire task of multimedia content browsing, a scalable architecture can be adopted to break up the task among the small mobile device, a Hard Disk Drive (HDD), and a resource-rich computing device.

This description is not intended to be a complete description of, or limit the scope of, the invention. Other features, aspects, and objects of the invention can be obtained from a review of the specification, the figures, and the claims.